ABC

Med Trib 39

Medical Tribune and Medical News

© 1975, Medical Tribune, Inc.

Vol. 16, No. 39 — world news of medicine and its practice—fast, accurate, complete — Wednesday, November 5, 1975

From Planned Parenthood:

New Guidelines Set For Contraception In Women Over 40

By Frances Goodnight
Medical Tribune Staff

New York—What advice about contraception methods should be given to women over 40 in the wake of recent reports from Britain that use of oral contraceptives by older women is linked to an increased risk of myocardial infarction?

The guidelines definitely include making sure that such patients receive full information about the risk-benefit ratio of the agents, says Dr. Louise B. Tyrer, vice president for medical affairs of the Planned Parenthood Federation of America.

Dr. Tyrer emphasized during an interview with Medical Tribune that the new reports constitute the first documented proof of association between the "pill" and heart attacks.

An aftermath, she noted, has been the announcement by the Food and Drug Administration that it plans to revise labeling for oral agents to reflect the recommendations of its obstetrics and gynecology advisory committee that patients over 40 "be made thoroughly aware of the increased risk and be urged to utilize other forms of contraception."

Findings from the British studies indicate that the estimated incidence of nonfatal myocardial infarction in women aged 40 to 44 is 9.9 per 100,000 nonusers of oral contraceptives compared to 56.9 per 100,000 users in the

Continued on page 15

Transposed Arteries: First Total Correction

By Nathan Horwitz
Medical Tribune Staff

Detroit—The first successful total correction of transposed great arteries was reported here by a Brazilian surgical team.

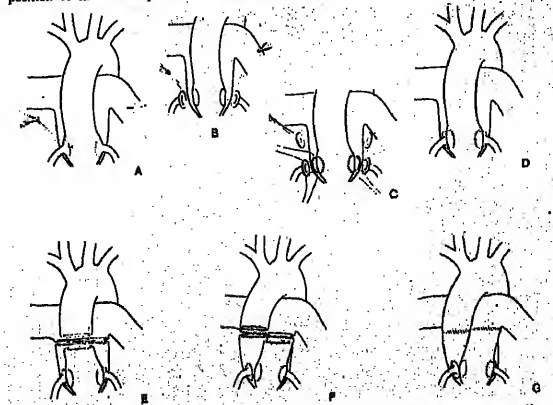
Overcoming technical problems that have frustrated heart surgeons for more than two decades, the team was able to transfer the position of the coronary arteries in retransposed great vessels and achieve normal blood flow conduits in a 40-day-old infant with a large ventricular septal defect, Dr. A. D. Jatene told the 2nd International Symposium on Cardiac Surgery at the Henry Ford Hospital.

Dr. Jatene is Professor of Surgery at the Cardiologic Institute in Sao Paulo, Brazil.

The achievement was described as a "great technical triumph" by Dr. John W. Kirklin, Professor and Chairman of the Department of Surgery, University of Alabama. He added that Dr. Jatene's procedure offers "a very exciting" surgical approach, especially in patients with a large VSD.

In describing the new procedure, Dr.

Continued on page 20



Schematic presentation of the new procedure for total anatomical correction of transposed great vessels in patients with VSD. Figure (A) shows ascending aorta, presently anterior, pulmonary trunk, presently posterior, and the proximal portion of the coronary arteries. Two stitches in the anterior wall of the pulmonary artery show where the coronaries will be sutured. The coronaries are excised (B), along with pieces of the aortic wall, and the openings are closed with a patch. At (C) and (D), corresponding pieces are resected from the pulmonary artery and the coronaries are implanted in the new sites. Ascending aorta and pulmonary trunk are resected (E), with differences in diameter between the vessels corrected by two sutures in the distal and proximal stumps of pulmonary artery. Distal end of pulmonary artery is sutured to proximal end of anterior artery, now without coronaries.

making rounds — at press time

A LITTLE INSURANCE - 14 Atlanta restaurants and two hotels overcharge for cigarettes and split profit between heart and cancer research. The idea, begun by late owner of the Coach and Six who quit smoking after an M.I., is continued by his widow, Mrs. Beverly Soloff. She told MT that in 1 yr. 1 machine took in an extra $3800. "People who smoke are the most frightened of all and their reaction is incredibly good. They feel less guilty for smoking and feel like they're buying a little insurance."

Major Victory Seen In Capitation Grant Policy Reversal

Medical Tribune Report

Washington—The Ford administration has reversed its policy, inherited from the previous administration, to end capitation grants to medical and dental schools and has unveiled a new proposal that is expected to move the long-stalemated health manpower legislation several steps closer to enactment.

The policy change is viewed by observers as a major victory by new H.E.W. Secretary F. David Mathews, Ph.D., and Dr. Theodore Cooper, Assistant Secretary for Health, over the Office of Management and Budget.

Continued on page 20

High Cataract Rate Found in Child Asthmatics on Steroids

Medical Tribune Report

Denver—A high incidence of cataract formation in asthmatic children who regularly take corticosteroids was reported here by a team of physicians from Fitzsimons Army Medical Center and the National Asthma Center.

The study, presented at the 28th Annual Symposium on Pulmonary Diseases here, revealed cataract formation in 10.8 per cent of 92 long standing, severe, steroid-dependent asthmatics.

Although past animal studies have been unable to prove a definite cause and effect relationship between steroid use and cataract formation, Dr. Harry S. Spaulding Jr., chief of the pediatric outpatient service at Fitzsimons, said physicians should definitely be alerted to the association of chronic steroid use in child asthmatics with a change in lens pathology.

"Overall, the children in our study ranged from 11 to 15 years of age with an average five-year history of steroid dependency. Slitlamp examination by two independent ophthalmologists revealed definite cataract formation in 10 children, with an additional 21 patients showing some change in lens pathology.

"Obviously some of these children wouldn't be alive or couldn't function normally without steroids, despite the advances made in chemotherapeutic agents. However, we think physicians should be made aware of our findings," Dr. Spaulding told Medical Tribune.

Continued on page 20

New Drug Combination Held Effective Against All Bacteria

Medical Tribune Report

WASHINGTON, D.C.—Development of a new antibacterial combination drug which has proven effective against every bacterial species tested so far, including Pseudomonas aeruginosa, was reported here by investigators from the Merck Sharp & Dohme Research Laboratories at a conference sponsored by the American Society for Microbiology.

While the drug has not as yet been studied in man, extensive laboratory and animal tests suggest it may be a potential alternative agent in the treatment of bacterial strains that have acquired a resistance to other antibiotics, the scientists said.

Guarded Reaction

Initial reaction to the report was guarded. Reflecting the opinion of many, Dr. Merrill Snyder, Professor of Medicine in Clinical Microbiology at the University of Maryland School of Medicine in Baltimore, said, "While I commend the investigators on their work, the results are far from applicable to man. The concepts that have been presented are certainly intriguing but whether this will have some practical application remains to be seen."

MK641/MK642, as the drug is currently known, works by inhibiting bacterial cell wall biosynthesis, explained Frederick M. Kahan, discoverer of the antibacterial combination.

Although bacterial cell wall biosynthesis is also the target of attack of several classes of widely-used antibiotics, including the penicillins and cephalosporins, the new agent is chemically unrelated. It is a fixed ratio combination of 2-deutero-3-fluoro-D-alanine (DFA), a new substance synthesized by Merck scientists, and a derivative of cycloserine (PCS), a 20-year-old antibiotic with limited therapeutic applications.

When combined, the two elements work synergistically to prevent bacteria from synthesizing D-alanine, an indispensable constituent of the cell wall of every type of bacteria, the research team explained.

Development of MK641/MK642 derived from observations that bacteria produce D-alanine through enzymatic conversion of L-alanine and that while L-alanine plays a key role in human metabolism, D-alanine does not. Therefore, the team theorized, an agent which prevented production of only D-alanine would eliminate bacteria in an infected individual without interfering with normal body functioning.

Biologic analyses of DFA show that it prevents bacteria from synthesizing the necessary D-alanine. However, DFA in concentrations several times higher than the minimum inhibitory concentration has the paradoxical ability to restore bacteria to normal growth. In a phenomenon called "self-reversal," DFA is used by bacteria in place of the missing D-alanine, Mr. Kahan told the meeting.

The addition of PCS, he continued, successfully prevents bacteria from using DFA and thereby ensures DFA's

Continued on page 19

Hospital Visitor

Japan's Empress Nagako (right rear) looks on as patients at Chicago's Wyler Children's Hospital prepare doll for surgery.

Antidotes Listed On Toxic Products Termed Outdated

Medical Tribune Report

DENVER—Many common household products that can be injurious if swallowed or inhaled still carry outdated and possibly harmful information about antidotes on their package labels, a clinical toxicologist warned here.

Dr. Barry H. Rumack, director of the Rocky Mountain Poison Center in Denver General Hospital, cited numerous examples of such faulty antidotal information, including the directives given on containers of *Drano*, *Parson's Ammonia*, *Easy-Off Oven Cleaner*, and Johnson Wax Company's *Big Wally*.

"The primary problem is that managements of poisons have been improved and upgraded over the years, and many of the companies haven't changed their labels—or at least that portion of their labels—in many years," Dr. Rumack told a conference on critical care held at Swedish Memorial Hospital.

To provide up-to-date information for physicians on potential poisons and their treatment, Dr. Rumack and his colleagues have developed a compendium on more than 100,000 products and compounds. Called "Poisindex," the poison information system is now used at some 125 hospitals and emergency rooms.

In the case of *Drano*, Dr. Rumack explained that the antidote directive correctly warns against induction of vomiting if the substance has been swallowed. However, the label also advises giving vinegar or a citrus fruit juice. Since *Drano* is an alkali, the natural acids in these liquids "may cause an increase in the burning of the mouth or esophagus."

'Absolutely Wrong'

The final instruction is to follow the juice with butter or a cooking oil which he calls "absolutely wrong, since it will inhibit the physician's ability to determine the extent of injury and what further treatment is necessary."

Another instance of an outdated antidote directive, according to Dr. Rumack, is the caution found on the labels of most petroleum distillates, oils, and other hydrocarbons, to avoid induction of vomiting.

He said that most major poison centers now follow the policy of inducing emesis if the patient has ingested a possibly toxic amount of hydrocarbon, is breathing normally, has no central nervous system depression, and has a good gag reflex.

If only a very minor amount of the chemical has been ingested, then catharsis alone is probably adequate. But at the other extreme, if the patient already shows CNS or respiratory depression, then intubation should be performed followed by gastric lavage.

The fact that parents usually turn first to the antidotal information on labels when a child ingests or inhales a toxic substance is of particular concern to Dr. Rumack. He recommends that anyone facing a poison emergency contact a poison information center before giving any antidote.

Careful Drug Use Urged in Intractable Pain

Medical Tribune World Service

FLORENCE, ITALY—The use of adjuvant drugs such as anti-anxiety and ataractic agents in tandem with narcotics when the latter become necessary for relief of intractable pain was recommended here by Dr. Francis F. Foldes, Professor of Anesthesiology at the Albert Einstein College of Medicine.

"By the judicious combination of these agents, it is possible to provide active, pain-free, and relatively alert days and restful nights for the patient," Dr. Foldes told the First World Congress on Pain Research and Therapy.

Dr. Foldes cautioned against administration of narcotics for painful conditions of limited duration. Pointing out that "even relatively brief" use may cause physical and psychologic dependence, he advises that narcotic use in the presence of acute pain be limited to emergency situations (extensive trauma, acute coronary occlusion, etc.) and severe postoperative pain.

The anesthesiologist also emphasized the need to avoid narcotics for as long as possible in patients with chronic pain and relatively long life expectancy.

"All other methods of pain relief, such as the use of analgesics, chemical or surgical interruption of pain pathways, self-induced electrical stimulation of the spinal cord or specific brain areas, and various forms of psychotherapy should be tried before resorting to the chronic administration of narcotics," he said.

But when intractable pain makes the use of narcotics unavoidable, Dr. Foldes suggests the following guidelines for management of patients who can remain at home:

Management Guides

- Start with orally active narcotics—specifically, the less potent compounds like codeine or oxycodone—and increase dosage gradually. With some types of pain, the pain reduction can be potentiated by non-narcotic analgesics.

If untoward side effects develop, try first an orally active agonist-antagonist (such as pentazocine) and subsequently meperidine, methadone, or levorphan.

- Try to increase the analgesic effect of narcotics, and diminish their side effects, by giving adjuvant drugs. For example, during the daytime, benefits may be gained by the simultaneous administration of dextroamphetamine sulfate with the narcotic. At night, the combination of the narcotic with a suitable ataractic agent will produce analgesia and sleep "with less respiratory depression than that encountered after larger doses of narcotics used alone."
- In the presence of fear, anxiety, and depression, employ a combination of narcotics with a suitable psychotropic agent. Tranquilizers often relieve narcotic-induced nausea and vomiting, although they are less effective against such symptoms caused by the pathologic process itself.
- Consider anticholinesterases to combat constipation and urinary retention, since they permit reduction of the narcotic dosage and have a direct stimulating effect on gastrointestinal motility and on bladder tone.
- Keep in mind the possibility that adjuvant drugs can produce untoward effects—either on their own or by interaction with narcotics. "The most important of these are the orthostatic hypotension caused by many ataractic drugs and the markedly increased respiratory depression resulting from the combined use of monoamineoxidase inhibitors and narcotics."
- When parenteral administration of narcotics becomes necessary for satisfactory pain relief, remember that this is "not necessarily a reason for hospitalization" provided someone is available around the clock at home to give injections and to watch the patient.

Dr. Foldes considers transfer to a hospital essential if the patient requires intensive nursing care beyond the resources of the family.

Management of pain in this setting depends on the circumstances, he pointed out. For patients who are not bedridden, he believes the principles governing the use of narcotics should be similar to those advised for care at home.

But he puts the emphasis on comfort for patients who are hospitalized because of the rapid progression of pathology, who have a short life expectancy, and who have "no pleasure out of life" or the desire to live.

"The dose and frequency of administration of narcotics and other drugs should be geared to relieving pain, air hunger, nausea and emesis, and anxiety, even at the cost of reducing life expectancy," he said.

Individualized Therapy Urged in Breast Ca

Medical Tribune Report

HOUSTON—"The availability of many different therapies for a given condition reflects the inadequacy of any single modality," said Dr. Charles K. Tashima Associate Professor of Medicine, The University of Texas Health Science Center at Houston. "Such is the case for breast cancer."

Improvement in treatment can be made by better selecting patients to receive various treatment options: surgery, radiotherapy, endocrine manipulation and chemo-immunotherapy, he told a seminar on the medical management of malignancy sponsored by the M. D. Anderson Tumor Institute.

Dr. Tashima indicated that he favored the Halsted radical mastectomy "when the disease is sufficiently limited in extent so that cure is possible." Less extensive surgical procedures, combined with radiotherapy, represent another alternative. The axilla is not usually irradiated if dissection is adequate, though with significant risk of recurrent disease in the chest wall, the wall will be irradiated, he said.

Chemo-Immunotherapy

Dr. Tashima emphasized that treatment should be modified to fit an individual patient, with emphasis in initial presentation on surgery and radiotherapy. Chemo-immunotherapy currently used in his department consists of FAC-BCG(5-FU, Adriamycin and Cytoxin plus BCG) which produces a response in 75 per cent of patients and median remission of 16 months. Adriamycin is the best single drug in use, Dr. Tashima stated.

He does not recommend prophylactic castration in breast cancer patients nor does he suggest taking women off birth control pills. "Patients with functioning ovaries are probably not affected by small additions of hormones, so that birth control pills are usually not interdicted in menstruating women," he said. However, he does recommend cessation of hormones for replacement therapy for menopause. "Even small doses of estrogens can aggravate breast cancer once it has developed clinically," he said.

However, patients with receptor-containing tumors may benefit from endocrine therapy. Fifty per cent of primary tumors and a small percent of metastatic lesions are estrogen-receptor positive.

Dr. Tashima uses the team approach in determining appropriate therapy. Radiotherapist, oncologist, and surgeon together determine the treatment plan. The surgeon's role has somewhat changed since axillary dissection may now be more important as a staging procedure than as a method of cure. "The recent adjuvant studies utilize the presence of axillary metastases as an indication for chemotherapy," he said. Such staging should not necessarily be classified by usual methods, which relate to the surgeon's ability to benefit a patient, but should be based on clinical evidence showing primary, regional or metastatic carcinoma.

The doctor also takes exception to the concept of cure. "Cure in cancer is not common, but we are able to do more than palliate our cancer patients. We can now often render a patient clinically free of disease, but usually only for a variable period of time."

Dr. Tashima proposes a new concept, N.E.D. (no evidence of disease), to formalize this philosophy. If a patient were N.E.D., there would be no symptoms referable to cancer, no physical findings of cancer, and no x-ray, scan or laboratory findings indicating the presence of cancer. To formulate such a classification, the physician would consider extent of disease prior to a specific treatment, treatment type, and duration since treatment.

Such a concept would help to determine the recurrence possibility for various groups. He feels it is urgent, since adjuvant chemotherapy significantly affects recurrence rates and survival.

He also feels a method of categorizing patients according to number of sites involved, amount of tumor, and tumor growth rate would further help to select patients for appropriate therapy, including those patients for whom no treatment is appropriate.

Significant Risk

"In spite of the aggressive approach we have adopted, all the modalities of therapy carry a significant risk and the side effects of treatment are considerable," Dr. Tashima said. For the patient with a small primary and negative axillary nodes, no radiotherapy or adjuvant chemoimmunotherapy is offered, since a radical mastectomy provides a 10-year survival for 80 per cent of patients. He also mentioned the occasional patients with asymptomic metastatic disease, who have lived with their disease for a number of years. "They appear to have an adequate defense to the tumor and treatment may even be deleterious for these patients."

Though a patient with both primary and metastatic disease may undergo a simple mastectomy, radiotherapy, and chemotherapy, Dr. Tashima again emphasized his belief in the radical procedure, if the choice is simple vs. radical. "There's lots of discussion about things that probably won't make a difference in overall survival. But until more data are in, I would go with the radical," he said.

Postinfarct Glucose Response May Predict Recurrence Risk

Medical Tribune World Service

MARTIN, CZECHOSLOVAKIA—Abnormal response to a glucose tolerance test in post myocardial infarction patients may be predictive of risk of future infarction, according to Dr. V. Karlicek, of the department of internal medicine, University Hospital, Pilsen, Czechoslovakia. Higher-than-normal peaks of longer-than-normal duration were found after oral glucose stimulation in 75 per cent of patients with myocardial infarction, he told the International Endocrine Society meeting here.

In one third of the positive group, the insulin abnormality was the only biochemical defect found after intensive study, Dr. Karlicek said. It was twice as prevalent as raised blood levels of cholesterol or triglycerides.

As a result of these findings, measurement of immunoreactive plasma insulin has become routine for post infarction patients at the Pilsen clinic.

A study of 80 such "insulin risk" patients showed that a course of graded physical exercise converted the insulin response curve to oral glucose back to normal within six months.

Lung Disease Mortality Dropped in Fuel Shortage

Medical Tribune Report

BERKELEY, CALIF.—The mortality rate from cardiovascular and chronic lung disease decreased substantially in the San Francisco Bay area during last year's nationwide fuel shortage but returned to normal levels when it ended, concluded a study by Dr. Stephen Brown of the U.C.–Berkeley School of Public Health.

When gasoline sales fell nearly 10 per cent around San Francisco, the death rate from such chronic lung ailments as bronchitis, asthma, and emphysema dropped 33 per cent in San Francisco and 38 per cent in less-urbanized Alameda County. Heart disease deaths also dropped, by 17 and 11 per cent in the respective areas, he said.

Appetite Control Mechanism Studied

Photo By Susan Pogany

Studies in monkeys of the brain's appetite control centers and the mechanism of satiety are conducted by Dr. Paul R. McHugh at the University of Oregon Health Sciences Center, and have shown that satiety in animals receiving food directly into stomach is influenced more by calories than nature of food.

index

CLINICAL NEWS NOTE: *"Physicians have a right to refuse to prescribe the [oral contraceptive] agents if in their best judgment—after reviewing the history, the physical, and the lab tests—they feel the patient's risk is too high. They have to be able to practice according to the dictates of their conscience combined with their best medical judgment."* (Dr. Louise B. Tyrer, vice president for medical affairs, Planned Parenthood Federation of America. See page 1.)

feature index

Medical Tribune

CHRIS WOODBURY, Ph.D.
General Manager

HARRY HENDERSON, *Editor-in-Chief* — RICHARD GUBNER, M.D., *Associate Editor*
HAROLD FOSNOT, *Executive News Editor* — JOHN HEWITT, *Associate News Editor*
WILLIAM PRIFTIS, *Art Supervisor* — ANN CONNER, *Picture Editor*

ARTHUR M. SACKLER, M.D.
International Publisher

Advisory Board
JOHN ADRIANI, M.D. • RENE J. DUBOS, Ph.D.
JULES H. MASSERMAN, M.D.
BERNARD LOWN, M.D.
ALBERT B. SABIN, M.D.
ALTON OCHSNER, M.D.
ROBERT A. CHASE, M.D.
LEO G. RIGLER, M.D.

880 Third Avenue, New York, N.Y. 10022
[redacted] • Telephone: 421-4000

Circulation audited by Business Publications Audit of Circulation, Inc.

MEDICAL TRIBUNE is published each Wednesday except on April 30, July 9, July 30, Aug. 13, Oct. 29 and Dec. 31, by Medical Tribune, Inc., 880 Third Ave., New York, N.Y. 10022. Controlled circulation postage paid at Vineland, N.J. 08360 Subscription $25.00, Students $7.50.

Implanted 'Umbrella' Filter Prevents Recurrent Emboli

Medical Tribune World Service

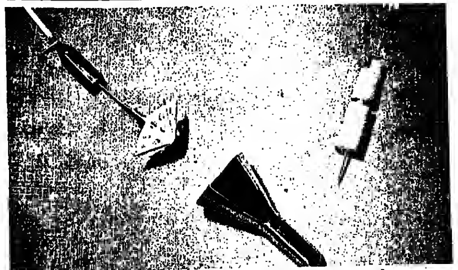
AMSTERDAM, NETHERLANDS — Apart from general prophylaxis, one of the safest and most effective ways to prevent recurrent pulmonary embolism is to implant an "umbrella" filter in the infra-renal vena cava, a German surgical team reported at the 9th European Federation Congress of the International College of Surgeons here.

Since the overwhelming majority of pulmonary artery emboli reach the lung from the lower extremity through the inferior v. cava, the method of choice is to interrupt the pathway between the confluence of the pelvic veins and the entry of the renal veins, Dr. Volkar Schlosser, head of the department of cardiovascular surgery, Freiburg University Clinic, stated.

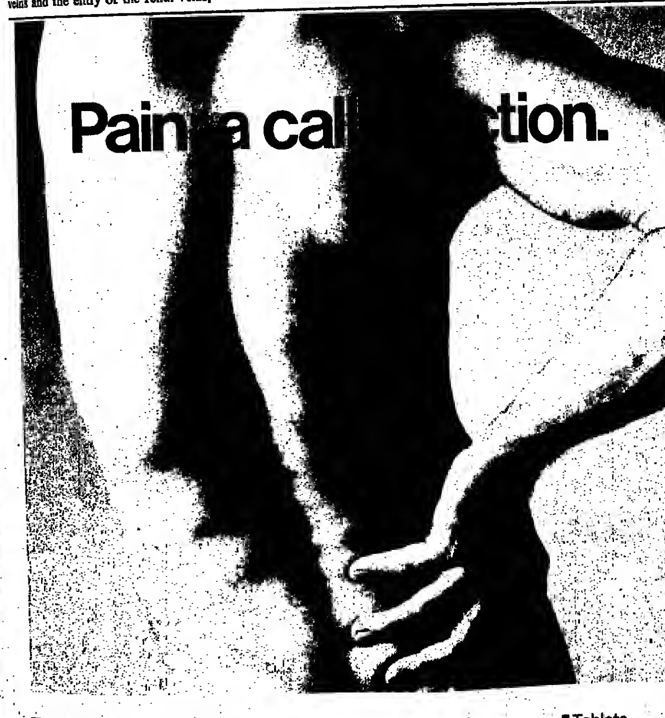
Describing a series of 53 patients, Dr. Schlosser said a synthetic screen filter, mounted on a steel framework, is introduced into the inferior v. cava transvenously under televisual control from the cervical vein.

The entry of the renal vein is marked by infusion urography with visualization of the renal pelvises, and then the filter is released, hooked up and screwed off the introducing catheter at the level of the 3rd to 4th lumbar vertebra below the renal pelvises.

Continued on page 21



Synthetic "umbrella" screen filter, above left, prevents recurrent pulmonary embolism when implanted in the infra-renal vena cava via catheter (also shown). Device is introduced intravenously under televisual control from cervical vein, then screwed off catheter at the 3rd to 4th lumbar vertebra below renal pelvises.



. . . brief summaries of editorials or comments in current medical and scientific journals.

The Nondisease Exam

". . . If one examines the balance sheet of many physicians . . . the cost benefit to the provider in terms of gross and net income from the periodic health examination or screening procedures may be considerable. Many practitioners have too long set the visit fee as the "loss leader," while profits arise from the many laboratory tests appended on to the routine—or not so routine—visit. Similarly, reimbursement formulas as established by hospitals and third parties are frequently such that the hospital could not afford to do fewer laboratory tests; abolishing the admission screening that Korvin questions might well push some already hardpressed institutions further towards the brink!

"With this kind of economic incentive firmly entrenched, one has to be realistic about chances for making patterns of medical care more appropriate.

". . . we must reevaluate the objectives of the periodic health examination. . . . we should spend less time and money searching for what is all too often a nondisease." *(Editorial, Thomas L. Deblanco, M.D., and John Noble, M.D., Ann. Int. Med. 83:271, Aug., 1975)*

Neglected Principle

"Most emergency abdominal operations have a clear primary mission: to save a life. Often the patient is a subpar surgical risk as a direct result of the condition creating the emergency. A self-evident principle should govern the surgeon's behavior in these situations: the life-threatening condition should be corrected by the safest and simplest means. Yet, at times, otherwise level-headed surgeons seem to depart from this 'common' sense.

"*Example:* An eighty year old woman correctly undergoes removal of a gangrenous appendix. *At the same operation*, the surgeon reduces and repairs a large esophageal hiatus hernia suspected from the findings on the chest x-ray film! The result is an undeservedly uncomplicated postoperative course, from which the surgeon erroneously infers that he did the patient a favor. He ignores the risk, which might have cost the patient's life, of prolonging the operation, operating through an infected field, and correcting a situation unrelated to the emergency and probably present for years without causing symptoms . . .

"We all have known surgeons, and not all of them young, with the uncanny destructive instinct to do the one additional thing that may lengthen the operation inordinately or lead to postoperative complications and even death. Lest *we* be that surgeon, let us remind ourselves to *save life* at emergency operations and omit the frills! Who would condone the commercial airline pilot who indulges in aerial acrobatics before safely landing his passenger-filled 747?" *(Editorial, Stanley O. Hoerr, M.D., Amer. J Surg. 130:1, July, 1975)*

Colorectal Cancer A Major Problem —Little Progress

Medical Tribune Report

HOUSTON—Colorectal cancer "has been a major public health problem for the last 20 years though little progress has been made in treatment," said Dr. Giora Mavligit, Associate Professor of Medicine, the University of Texas Health Science Center at Houston. He predicted that in 1975, 100,000 new cases of colorectal disease will be discovered and that half will die.

"Diagnosing fast and early, a good surgical report, good analysis by the pathologist and knowing the number, location and geography of involved lymph nodes will improve the prognosis of patients with colorectal cancer," he said at a seminar on the medical management of malignancy sponsored by the M. D. Anderson Hospital and Tumor Institute.

He urged pathologists to count all nodes and surgeons to remove as many nodes as possible in the area of resection. "Chemotherapy is more effective with a small amount of tumor than with cancer all over," he said.

Risk of Recurrence

Twenty to 30 per cent of colorectal cancer cases involve disease through the wall and fat as well as regional lymph nodes. Radiation of the rectocecum preoperatively is of some value, but chemotherapy has a marginal effect without statistical significance.

After surgical removal of the tumor, these patients run a high risk of recurrence, 50 per cent at 16 months, with 32 per cent having a five-year survival. Seventy-five per cent of cases will be failures, Dr. Mavligit said.

Although the surgeon may say he's cured the patient, often there are tumor cells left after surgery, Dr. Mavligit said. Micrometastases to the liver should be targets of adjuvant therapy, either BCG or BCG plus 5-FU, he indicated. "BCG kills a certain fraction each time it is administered so it must be given repetitively," he said. Dr. Mavligit administers BCG by scarification on a weekly basis.

"Chemotherapy will kill most cells and immunotherapy, 'the last cell'," the investigator stated. He speculates that there may be synergism between immune response and chemotherapy.

In a group of patients with five or more positive nodes receiving either BCG or BCG and 5-FU, survival was longer than in those patients who underwent surgery alone. There were no deaths in the group receiving combination therapy after 30 months and 25 per cent of the treated group were alive after 41 months.

An average of 11.2 months elapsed from surgery to relapse in patients undergoing only surgery. Patients receiving BCG or BCG and 5-FU had averages of 21 and 14.4 disease-free months respectively.

In all patients with colorectal disease, 50 per cent were dead 40 months postoperatively if they did not receive immunotherapy. There were no deaths in patients receiving BCG or BCG plus 5-FU at 16.6 months.

. . . *brief summaries of editorials or comments in current medical and scientific journals.*

The Nondisease Exam

". . . If one examines the balance sheet of many physicians . . . the cost benefit to the provider in terms of gross and net income from the periodic health examination or screening procedures may be considerable. Many practitioners have too long set the visit fee as the "loss leader," while profits arise from the many laboratory tests appcoded onto the routine—or not so routine—visit. Similarly, reimbursement formulas as established by hospitals and third parties are frequently such that the hospital could not afford to do fewer laboratory tests; abolishing the admission screening that Korvin questions might well push some already hardpressed institutions further towards the brink!

"With this kind of ecooomic incentive firmly entrenched, one has to be realistic about chances for making patterns of medical care more appropriate.

". . . we must reevaluate the objectives of the periodic health examioation. . . . we should spend less time aod money searching for what is all too often a nondisease." *(Editorial, Thomas L. Deblanco, M.D., and John Noble, M.D., Ann. Int. Med. 83:271, Aug., 1975)*

Neglected Principle

"Most emergency abdominal operations have a clear primary mission: to save a life. Often the patient is a subpar surgical risk as a direct result of the condition creating the emergency. A self-evident principle should govern the surgeon's behavior in these situations: the life-threatening condition should be corrected by the safest and simplest means. Yet, at times, otherwise levelheaded surgeons seem to depart from this 'common' sense.

"*Example:* An eighty year old woman correctly undergoes removal of a gangrenous appendix. *At the same operation,* the surgeon reduces ond repairs a large esophageal hiotus hernio suspected from the findings on the chest x-ray film! The result is an undeservedly uncomplicated poatoperative course, from which the surgeon erroneously infers that he did the patient a favor. He ignores the risk, which might have cost the patient's life, of prolonging the operation, operating through an infected field, ond correcting a situation unrelated to the emergency and probably present for years without causing symptoms . . .

"We all have known surgeons, and not all of them young, with the uncanny destructive instinct to do the one additional thing that may leogthen the operation inordinately or lead to postoperative complications and even death. Lest *we* be that surgeon, let us remind ourselves *to save life* at emergency operations and omit the frills! Who would condone the commercial airline pilot who indulges in aerial acrobatics before safely landing his passenger-filled 747?" *(Editorial, Stanley O. Hoerr, M.D., Amer. J Surg. 130:1; July, 1975)*

Colorectal Cancer A Major Problem —Little Progress

Medical Tribune Report

HOUSTON—Colorectal cancer "has been a major public health problem for the last 20 years though little progress has been made in treatment," said Dr. Giora Mavligit, Associate Professor of Medicine, the University of Texas Health Science Center at Houston. He predicted that in 1975, 100,000 new cases of colorectal disease will be discovered and that half will die.

"Diagnosing fast and early, a good surgical report, good analysis by the pathologist and knowing the number, location and geography of involved lymph nodes will improve the prognosis of patients with colorectal cancer," he said at a seminar on the medical management of malignancy sponsored by the M. D. Anderson Hospital and Tumor Institute.

He urged pathologists to count all nodes and surgeons to remove os many nodes as possible in the area of resection. "Chemotherapy is more effective with a small amount of tumor than with cancer all over," he said.

Risk of Recurrence

Twenty to 30 per cent of colorectal cancer cases involve disease through the wall and fat as well as regional lymph nodes. Radiation of the rectocecum preoperatively is of some value, but chemotherapy has a marginal effect without statistical significance.

After surgical removal of the tumor, these patients run a high risk of recurrence, 50 per cent at 16 months, with 32 per cent having a five-year survival. Seventy-five per cent of cases will be failures, Dr. Mavligit said.

Although the surgeon moy say he's cured the patient, often there are tumor cells left after surgery, Dr. Mavligit said. Micrometastases to the liver should be targets of adjuvant therapy, either BCG or BCG plus 5-FU, he indicated. "BCG kills a certain fraction each time it is administered so it must be given repetitively," he said. Dr. Mavligit odministers BCG by scarification on a weekly basis.

"Chemotherapy will kill most cells and immunotherapy, 'the last cell'," the investigator stated. He speculotes that there may be synergism between immune response and chemotherapy.

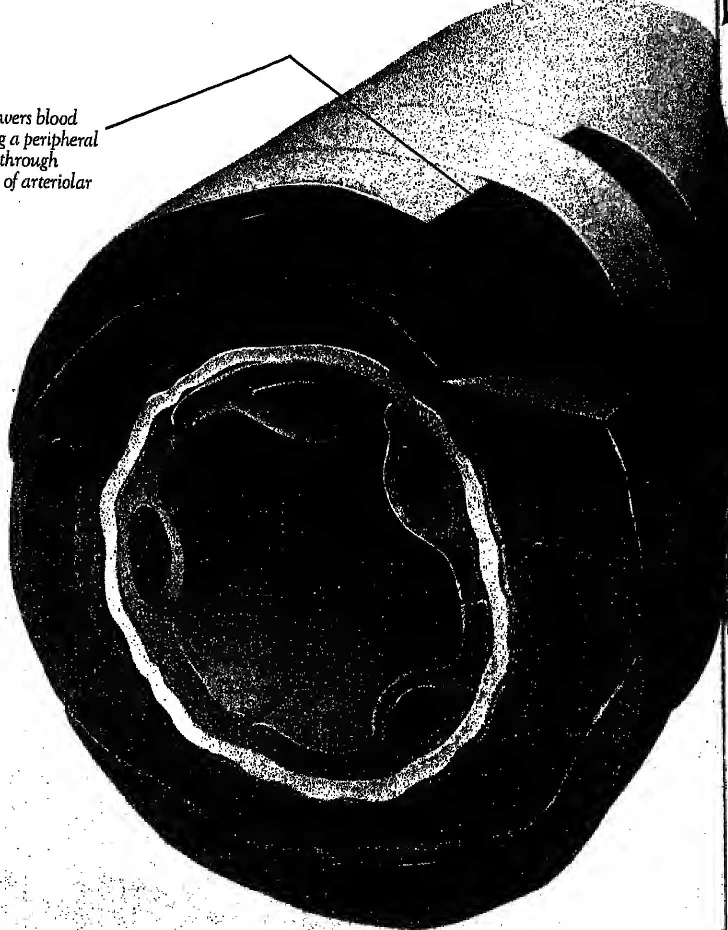
In a group of patients with five or more positive nodes receiving either BCG or BCG and 5-FU, survival was longer than in those patients who underwent surgery alone. There were no deaths in the group receiviog combination therapy after 30 months and 25 per cent of the treated group were alive after 41 months.

An average of 11.2 months elapsed from surgery to relapse in patients undergoing only surgery. Patients receiving BCG or BCG aod 5-FU had averages of 21 and 14.4 disease-free months respectively.

In all patients with colorectal disease, 50 per cent were dead 40 months postoperatively if they did not receive immunotherapy. There were no deaths in patients receiving BCG or BCG plus 5-FU at 16.6 months.

Apresoline®...where the action is in treating hypertension
(hydralazine)

Apresoline lowers blood pressure by exerting a peripheral vasodilating effect through a direct relaxation of arteriolar smooth muscle.



An antihypertensive idea whose time has come

Doctors who treat hypertension are increasingly interested in the one oral drug that has a mechanism of action exclusively its own—Apresoline.

Apresoline is in an antihypertensive class by itself because it reduces blood pressure through a unique mechanism. Acting at the ultimate site of hypertension, it directly relaxes arteriolar smooth muscle to decrease peripheral vascular resistance and arterial pressure. As blood pressure falls, there is an accompanying rise in cardiac output and rate.

Apresoline also maintains or increases renal and cerebral blood flow.

Apresoline minimizes postural hypotension

Nickerson[1] describes the action of Apresoline as follows:

"A preferential effect on arterioles, as compared [illegible] allows the increase in cardiac output and minimizes postural hypotension; the latter is much less than [illegible] produced by agents blocking sympathetic nerves."

Apresoline avoids side effects associated with other agents

Such untoward reactions as drowsiness, lethargy, sedation, sexual dysfunction, and exacerbation of mental depression are not usually encountered with Apresoline. However, as with any antihypertensive agent, hydralazine should be used with caution where advanced renal damage exists.

Apresoline helps tailor the regimen to the patient

When Apresoline is added to an existing antihypertensive regimen, it introduces a different and complementary pharmacologic approach to the control of your patient's hypertension.

Apresoline thus affords the physician a variety of combinations with which he can construct regimens more closely molded to individual requirements. According to Freis[2] such a combination of drugs, each with a different antihypertensive mechanism, is the most effective way to control blood pressure. This may also permit lower drug dosages.

Apresoline lends itself admirably to the contemporary antihypertensive rationale and its therapeutic goals: more vigorous and more effective control of blood pressure through a plurality of mechanisms.

Apresoline: used effectively in the VA studies

Apresoline was one of the three basic drugs used in two published VA cooperative studies.[3,4]

References: 1. Nickerson M: Antihypertensive agents and the drug therapy of hypertension, in Goodman LS, Gilman A (eds): *The Pharmacological Basis of Therapeutics*, ed 4, New York, The Macmillan Company, 1970, p 729. 2. Freis ED: Hypertension: a controllable disease. *Clin Pharmacol Ther* 13:627-632, 1972. 3. Effects of treatment on morbidity in hypertension: Results in patients with diastolic blood pressures averaging 115 through 129 mm Hg. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 202:1028-1034, 1967. 4. Effects of treatment on morbidity in hypertension. II. Results in patients with diastolic blood pressure averaging 90 through 114 mm Hg. Veterans Administration Cooperative Study Group on Antihypertensive Agents. *JAMA* 213:1143-1152, 1970.

Next page: Apresoline (hydralazine) and the Hypertension Task Force

Apresoline® hydrochloride
(hydralazine hydrochloride)

TABLETS

INDICATIONS
Essential hypertension, alone or as an adjunct.

CONTRAINDICATIONS
Hypersensitivity; coronary artery disease; mitral valvular rheumatic heart disease.

WARNINGS
Chronic administration of doses over 400 mg per day may produce an arthritis-like syndrome leading to a clinical picture simulating acute systemic lupus erythematosus. This may also occur at lower doses. Most of these reactions are reversible upon withdrawal of therapy, but long-term treatment with steroids may be necessary and residua have been detected many years later. Complete blood counts, L.E. cell preparations and antinuclear antibody titer determinations are indicated before and periodically during prolonged therapy, even though patient is asymptomatic. These studies are also indicated in the presence of any unexplained symptoms.
Use MAO inhibitors with caution.

Usage in Pregnancy
The drug should be used only when, in the judgment of the physician, it is deemed essential to the welfare of the patient.

PRECAUTIONS
Use cautiously in suspected coronary artery or other cardiovascular diseases, cerebral vascular accidents, and advanced renal damage. Postural hypotension may occur, and the pressor response to epinephrine may be reduced.
Peripheral neuritis, evidenced by paresthesias, numbness, and tingling, has been observed. Published evidence suggests an antipyridoxine effect and addition of pyridoxine to the regimen if symptoms develop.
Blood dyscrasias, consisting of reduction in hemoglobin and red cell count, leukopenia, agranulocytosis, and purpura, have been reported rarely. If such abnormalities develop, discontinue therapy. Periodic blood counts are advised during prolonged therapy.

ADVERSE REACTIONS
Common: Headache; palpitations; anorexia; nausea; vomiting; diarrhea; tachycardia; angina pectoris. *Less frequent:* Nasal congestion; flushing; lacrimation; conjunctivitis; peripheral neuritis evidenced by paresthesias, numbness, and tingling; dizziness; tremors; muscle cramps; psychotic reactions characterized by depression, disorientation, or anxiety; hypersensitivity (including rash, urticaria, pruritus, fever, chills, arthralgia, eosinophilia, and, rarely, hepatitis); constipation; [illegible]

DOSAGE
Initiate therapy in gradually increasing dosages; adjust according to individual response. Start with 10 mg 4 times daily for the first 2 to 4 days, increase to 25 mg 4 times daily for balance of first week. For second and subsequent weeks, increase dosage to 50 mg 4 times daily. For maintenance, adjust dosage to lowest effective level. [illegible]

[illegible]

Tablets, 100 mg (peach, dry-coated): bottles of 100.

Consult complete literature before prescribing.

CIBA Pharmaceutical Company
Division of CIBA-GEIGY Corporation
Summit, New Jersey 07901

C I B A

The Only Independent Weekly Medical Newspaper in the U.S.

Medical Tribune

and Medical News
Published by Medical Tribune, Inc.

A Watergate-Like Stench

LET US NEVER FORGET that Watergate was not a simple political manipulation but the fundamental violation of American civilian rights—through subversion of the electoral process. Let us not forget that it was carried forward by a regime cloaked in the mantle of "law and order."

And let us now remember that part of the totality of the fraud perpetrated upon the American people was the creation of a drug abuse hysteria.

There is not the slightest doubt that problems of drug abuse exist. But, what was a genuine social ill and medical concern was manipulated for primarily political purposes. The real drug addiction and abuse problems in the United States relate, without any serious contention, to alcohol and cigarettes.

False issues lead to distorted perspectives and as a result a law was passed (Controlled Substances Act of 1970) in which, over the repeated protests of MEDICAL TRIBUNE, important therapeutic agents were stigmatized by association with strong drugs of abuse. Hospitals and doctors became burdened with more red tape paperwork. A new "drug regulatory agency" was created and the control of a huge sector of therapeutics was vested in the Justice Department's Drug Enforcement Agency. MEDICAL TRIBUNE at that time warned of the dangers of a "police" approach to medical problems and the potential threat to the rights of scientists.

The outcome is even more nightmarish than the prophecy.

First, in the last two years the use of hard drugs such as heroin and cocaine has increased—not decreased. Despite the deceitful claims of those seeking to enlarge the bureaucracy and despite the stupid claims of those consumerists who claimed that psychopharmacologic agents lead to major drug abuse, the facts reveal the opposite. There never was a correlation between the physician's prescribing of psychopharmaceuticals, in largest measure to middle-aged white women, and the use of hard drugs which relates to adolescent or young black and white males. The result was an impedance of medical therapeutics, a threat of shortage of *therapeutic* morphine, and the unimpeded growth of the vicious and disgusting hard drug problem we confront.

Second, the civil rights of individuals were violated, not just those of a Jane Fonda, but of simple, private families whose homes were violently broken into. The Justice Department, which should have set standards of probity, demonstrated the dangers implicit in the arrogance of power even in a democratic society. The violations of a psychiatrist's office was part of a complex of despicable actions which are now subsumed under the rubric of the generic term, Watergate.

Third, as though this were not enough, we are learning that the C.I.A. likewise became involved and in its maneuvers within the Drug Enforcement Agency engaged in a pattern of illegal actions within the country.

Fourth, at a time when it was impossible without forfeiting one's academic rights to continue research on LSD, it is now revealed that *a secret program* of LSD administration "to unsuspecting subjects to learn its effects" was associated with the death of a high level civilian researcher in biological warfare. His family is quoted as stating that "Without his knowledge or consent [he had] been given LSD by two C.I.A. employees during [a] research meeting."

Science, and particularly the biomedical sciences, must be protected from abuse as a publicity vehicle or as a political football if we are to continue to have a free and democratic science and a healthier society. A.M.S.

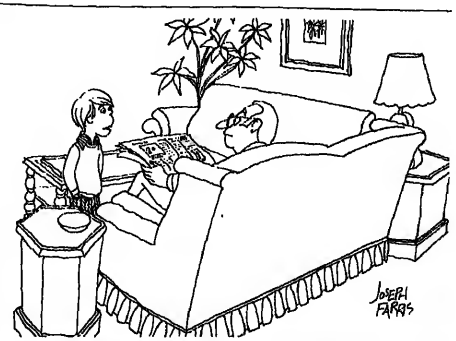
We Must Be Doing Something Right

THE TOP ADMINISTRATORS for health of the Department of Health, Education and Welfare have just issued the second Forward Plan for Health, aimed at the five-year period for fiscal years 1977-1981. We quote from the section on current health status: "After a decade of stable mortality rates in the United States, the age adjusted mortality rates have again shown a steady decline of one per cent per year since 1968. The causes of the leveling off during the preceding decade and the recent renewed downturn are not as yet well understood."

Perhaps the causes "are not as yet well understood" but as the title of a recent editorial put it, *We must be doing something right.* Curiously enough, the critics of health care in this country have not chosen to publicize this good news.

Transposed Great Arteries

CLINICAL QUOTE: *"Twenty days after surgery [the infant's] pulmonary pressure was 25/13 mm Hg and the pressure in the right ventricle was 60/10 mm Hg. The mean pressure in the left and right atria was 10 and 6 mm Hg, respectively. The infant was discharged three weeks after the operation. Fifty days after surgery, he was re-evaluated and considered in very good condition, without cyanosis. He presently weighs 5,500 grams against 3,700 at the time of surgery."* (Dr. A. D. Jatene, Professor of Surgery, Cardiologic Institute, Sao Paulo, Brazil, describing the first patient ever to undergo total anatomic correction for transposition of the great arteries. See page 1.)



"Say, Dad, was a dollar ever worth a dollar?"

LETTERS TO TRIBUNE

Shin Splints and Arches

I agree with Dr. Robert D'Ambrosia [MT, Sept. 24] that the term "shin splints" should be more sharply delineated. It should be limited to disorders of the anterior compartment. This is the true "shin splints."

What Dr. D'Ambrosia describes is another frequent problem, pain in the posterior tibial muscle, its attachment to the tibia and its tendon.

Treatment for this disorder consists in focusing on its function. Its tendon loops a sling for the arch and supinates the foot. The runner with an unstable pronating foot pulls on this tendon, the muscle and its attachment to the tibia. My experience, however, is that the pain is mostly in the muscle and its tendon.

The treatment? Support to an hypermobile pronating first metatarsal segment and a collapsing arch. 5000 foot strikes an hour can create havoc in this supporting muscle tendon complex. Shoes with good heel counters and solid shanks are a help, but usually a flexible non-compressible arch support is necessary. Do-it-yourself felt supports sometimes do the trick, but frequently help from an experienced sports podiatrist is necessary.

GEORGE A. SHEEHAN, M.D.
Red Bank, N.J.

Ode to Diabetes Hearings

Your report of the F.D.A. diabetes hearings prompted the following:

Oh, We Need To Design Many Waivers To Sign

Praise be to Pfont
Whom we've heard out
These many years
Arousing fears,
With religious zeal,
Seeking repeal
Of F.D.A. approval,
And near total removal,
Of oral agents
That (?) kill patients.

Now in this crusade,
To alert and aid
Dr. Pfont in his fight
To protect the right
Of the people to know
What the doctors don't know,
Is unskilled Sid,
Now making his bid,
For the hero's place—
The consumer's good grace.

Unskilled, I say,
Cause I'll bet 'til this day
Sid Wolfe never treated
Diabetes, nor weeded
The dastardly pill,
Which he believes can kill;
But the rest of us use
To relieve those who choose
To ask us for relief
Of considerable grief,
Caused by three "polys"
Of untreated diabetes,
And itching of skin
And blurring of vision,
Loss of weight and strength—
I could go on at length.

For be it from me
To judge U.G.D.P.,
But pills I don't give
To diabetics who live
In a comfortable state
With their glycemic fate,
And do not bemoan
Diet alone.

Could it just be
That U.G.D.P.
May have killed some cases
With Orinases,
By giving the pill
To patients not ill,
Only hyperglycemic—
Then hypoglycemic,
With too much catechol
For a diseased heart's control,
Causing V. Tach—
Then heart attack.

Sometimes, like the pills,
When Insulin kills,
It's hard to see
At the autopsy,
How the patient died
From lack of saccharide.

Oh, we need to design
More waivers to sign!

NELSON G. GOODMAN, M.D.
Bowie, Md.

Tribune Economic Analysis

Liquidity and Gold Prices

By ELIOT JANEWAY
Consulting Economist

From here on out, the more the rate of inflation jumps, the more it will dry up the liquidity available to everyone.

Roosevelt's purpose in raising the price of gold in the depression of the 1930s was explicitly and unequivocally to undo the ravages of deflation and to start up the corrective momentum of inflation. Roosevelt may have been an economic illiterate—no doubt practical politicians always are. But he grasped the marketplace reality that raising the price of gold primes the pump for inflation—provided liquidity is abundant enough to support the exercise. This was in Roosevelt's time. The opposite is the case now.

Spiraling Interest Rates

The resurgence of inflation is the direct and inescapable reason for the renewed spiraling of interest rates. Today, 7 per cent in tax-exempt income—14 per cent to anyone in a 50 per cent bracket—is no trick for investors willing to tie up money for a year. But money is too scarce and too scared to take advantage of this rate of return. Anytime money is unwilling and unable to accept bonus pay for the privilege of going to work, it's not likely to volunteer for the chance to shoot craps in the gold game.

It's little wonder that the very governments which the gold bugs counted on to bull the price of gold are now breaking it. The liquidity crunch is hurting them most. Governments are under the most urgent and endless pressure to raise cash. The actual announcements of sales from official government holdings are only the tip of the iceberg. No private speculators can hope to support the gold market when distress government selling is breaking it.

Ask Janeway

Would you recommend a retired couple invest the majority of their funds in bonds? We are considering BBB-rated utility bonds and long-term Treasury bonds because income is our highest priority. However, this would tie up funds for an extended period of time and would provide only minimum flexibility.

Medical Couple, M.D. & R.N.

What about conserving your capital? Your thinking would expose you to capital losses as interest rates continue to rise. Retirees may regard themselves as realistic in subordinating growth and gain to income, but they are actually being extremely unrealistic. As retirees you will have no chance to earn back any losses this thinking locks you into.

Send your questions on finances, investments, taxes to Janeway, MEDICAL TRIBUNE, *880 Third Avenue, New York, N.Y. 10022*

IN CONSULTATION

What's New and Important in Ophthalmology?

The Consultant
DR. ANTONIO R. GASSET
Assistant Professor of Ophthalmology
University of Florida College of Medicine

PERHAPS THE GREATEST ADVANCE in the treatment of corneal disease in over a decade has been the development of the soft contact lens and its use as a "bandage." Innumerable cases of severe blinding keratitis (corneal disease) have been cured or controlled through this relatively simple and inexpensive mode of therapy. Patients have been treated who had previously undergone almost all known medical and surgical modalities in an unsuccessful attempt to control the disease process or to restore vision. In the overwhelming majority of cases, soft lens therapy has been able to provide relief of pain, control of the underlying disease process, to promote the healing of damaged and diseased tissue, and, in many cases, to improve or to restore vision.

What are the characteristics distinguishing the hard contact lens from the soft contact lens?

Soft contact lenses are made of a type of hydrophilic or water-absorbent plastic. They have the brittleness of a cornflake when dry, but become soft and pliable when saturated with water, saline or tears. When placed on the eye, they mold themselves to the shape of the cornea, offering considerably more comfort than hard lenses, particularly in the early stages of wear. Because of their softness, they tend to minimize irritations, cornea swelling and abrasions sometimes caused by hard lens wear.

Hard contact lenses are made of methylmethacrylate or plexiglass, a material that provides excellent visual acuity in a wide range of visual defects. Since soft contact lenses weigh more than hard contact lenses, they have to be fitted slightly larger than the cornea diameter. They range in diameter from 12.3 to 15.5 mm. Hard lenses, in contrast, are presently fitted from 7.00 to 9.00 mm in diameter and don't quite cover the cornea. Due to the fact that these lenses are fitted larger than the cornea, one of the major problems of hard lens wearers—dirt specks or particles lodging under the lens—seldom arises with soft lenses.

When is the soft contact lens used therapeutically?

Eyes that are treated with the bandage lens are nearly always seriously diseased. With it the practitioner is able to bring comfort to patients who have had pain for years. This is a dramatic benefit that can be achieved in many cases by no other form of therapy now available. Soft contact lenses have helped to relieve pain and restore vision in patients with corneal ulcers, bullous keratopathy (corneal blisters) or "dry" eyes (a painful condition marked by an insufficiency of tears).

Soft lenses have also been useful in correcting aphakia (the result of cataract surgery). Permanent or constant wear of soft contact lenses in aphakia is not new. Since 1969, we and other ophthalmologists have been using the lathe-cut contact lens for permanent wear in a very selective group of aphakic patients. This procedure was reserved for cases where its use was absolutely necessary. However, once the patients were selected, most of them were able to wear the lens continuously, 24 hours a day. Not a panacea by any means, it requires a significant amount of knowledge and skill in contact lenses as well as in designing the surgery for this purpose, e.g., round pupil, elimination of corneal astigmatism, etc.

Heretofore, complications have been few and reversible. But more serious and permanent complications may result and will probably occur as the number of practitioners fitting these lenses for permanent wear as well as the number of patients increase. It is not my purpose to imply that permanent wear is safer than conventional techniques, but it is a very promising procedure for the future. Even at the present time, it may offer a safer alternative to intra-ocular lenses. Further improvement of either procedure may result in the wider use of these techniques. However, at the present time they should be limited to patients in whom conventional methods have failed and the proposed benefits clearly outweigh any possible risk.

While medical use of the bandage lense requires considerable attention and care, it does have advantages.

The main advantage of the procedure stems from the fact that no knife, no sutures, no hospitalization, no nurses, no abnormal financial costs are needed. In addition, if the therapy proves unsuccessful, or if for any reason the physician wishes to terminate therapy, he may do so by the simple procedure of removing the lens from the patient's eye. Moreover, it does not preclude later more risky surgical procedures.

For routine use of contact lenses, when should the hard contact lens be prescribed? When the soft lens?

This should be the choice of the individual, with the proper aid and consultation of his doctor. For optical reasons, there are persons who will see better with hard or soft contact lenses. Since soft lenses take the shape of the cornea, they tend to reproduce corneal astigmatism without correcting it. In these cases, both eye glasses and hard lenses can correct the blurring of vision caused by corneal astigmatism.

Another type of astigmatism, lenticular astigmatism, caused by an irregularity of the natural lens, is corrected only by eye glasses. In many cases, lenticular astigmatism itself corrects corneal astigmatism, eliminating the necessity of correction by necessory lenses. But it is also not uncommon to find that elimination of corneal astigmatism by hard contact lenses will result in the production of residual astigmatism or the bringing out of lenticular astigmatism with its blurring of vision. That this residual astigmatism has not been a significant drawback in the fitting of hard contact lenses stems from the fact that most patients find some degree of residual astigmatism quite tolerable if the other refractive errors are corrected.

While corneal astigmatism was assumed by some to be the main limiting factor in the wear of soft contact lenses, it has actually been a problem in only about 5 to 10 per cent of the population. More important, in fact crucial, is the fluctuation in vision. These fluctuations are experienced as alternate blurring and clearing of vision. The main cause of vision fluctuation with soft lenses is the fit of the lens. Individual corneas vary in diameter and curvature. Although a soft lens tends to take the shape of the cornea, it may not provide a perfect match even though it may feel comfortable. A poor match with a hard lens would cause corneal swelling, pain and discomfort; with a soft lens it is the vision that suffers.

If a soft lens is too curved for the cornea, it gets pressed in and out during blinking, causing alternate blurring and clearing of vision. If it is too small in diameter or too flat, it will move up and down with each blink or it will be displaced laterally and invariably it will cause fluctuations in vision. This fluctuation in vision caused by the early "Model-T" of the hydrophilic lenses has been greatly corrected by the introduction of lenses with different base curves. Vision fluctuation will probably be completely eliminated in the near future. The visual acuity obtainable in a given patient with a given refractive error is dependent not only on the patient and the refractive error, but also upon the expertise of the fitter and, to an extent, upon the availability of lenses of different base curves and diameters. Many people desire contact lenses for different purposes. The individual with a high degree of corneal astigmatism who can not wear hard contact lenses may be satisfied with this alternative for sports and social activities while wearing eye glasses when driving a car or reading a book. Since the main advantages of soft lenses are comfort and ease of adaptation, successful hard contact lens wearers should not be encouraged to switch from hard to soft contact lenses.

What problems do patients have with initial and prolonged use?

After many years and millions of patients wearing contact lenses, both hard and soft lenses have passed the test of time and have proven themselves both safe and effective. Certainly, however, many minor problems still remain with initial and prolonged use of these lenses.

It is said that for every person who successfully adjusts to hard contact lenses, another gives up because of intolerance to the lenses. Although tolerance has been significantly improved with the introduction of the semi-flexible, thin, small, hard contact lens, poor tolerance to a hard foreign body still remains the main problem. In nearly every respect, the soft contact lens is much kinder to the eye than the hard contact lens and is extremely well-tolerated by patients.

Hard contact lenses are more prone to cause corneal edema than soft. When the edema is light and superficial, the patient sees a great cloud over all objects. When the edema becomes more marked, the patient will notice brightly colored halos around light. A poorly fitted hard contact lens can cause a great deal of corneal edema in a relatively short time. Even a well fitted hard lens can cause corneal edema or injury of corneal epithelium. On the other hand, soft lenses are almost free of this unpleasant side effect. Soft lenses can be worn during all waking hours either from the first day or very shortly after the beginning of adaptation. Hard lens wearers suffer a loss of tolerance for the lens if they don't wear it on a rather regular basis for quite a few hours every day. The soft lens wearer can abandon the lens for as long as he or she wishes and start wearing it again any time without ill effects. Intermittent social wear is therefore a considerable advantage of this type of lense.

Hard contact lenses, particularly the old, large and thick lenses, when worn for long periods of time can produce a temporary change in the shape of the cornea. Patients are often inconve-

Continued on page

New Study of Sclerosis

Dr. Harry Bartfield, St. Vincent's Hospital and Medical Center, New York, will coordinate new multidisciplinary study of amyotrophic lateral sclerosis over next two years with NIH funding of $600,000-plus.

Tribune Economic Analysis

Liquidity and Gold Prices

By ELIOT JANEWAY
Consulting Economist

From here on out, the more the rate of inflation jumps, the more it will dry up the liquidity available to everyone.

Roosevelt's purpose in raising the price of gold in the depression of the 1930s was explicitly and unequivocally to undo the ravages of deflation and to start up the corrective momentum of inflation. Roosevelt may have been an economic illiterate—no doubt practical politicians always are. But he grasped the marketplace reality that raising the price of gold primes the pump for inflation—provided liquidity is abundant enough to support the exercise. This was in Roosevelt's time. The opposite is the case now.

Spiraling Interest Rates

The resurgence of inflation is the direct and inescapable reason for the renewed spiraling of interest rates. Today, 7 per cent in tax-exempt income—14 per cent to anyone in a 50 per cent bracket—is no trick for investors willing to tie up money for a year. But money is too scarce and too scared to take advantage of this rate of return. Anytime money is unwilling and unable to accept bonus pay for the privilege of going to work, it's not likely to volunteer for the chance to shoot craps in the gold game.

It's little wonder that the very governments which the gold bugs counted on to bull the price of gold are now breaking it. The liquidity crunch is hurting them most. Governments are under the most urgent and endless pressure to raise cash. The actual announcements of sales from official government holdings are only the tip of the iceberg. No private speculators can hope to support the gold market when distress government selling is breaking it.

Ask Janeway

Would you recommend a retired couple invest the majority of their funds in bonds? We are considering BBB-rated utility bonds and long-term Treasury bonds because income is our highest priority. However, this would tie up funds for an extended period of time and would provide only minimum flexibility.

Medical Couple, M.D. & R.N.

What about conserving your capital? Your thinking would expose you to capital losses as interest rates continue to rise. Retirees may regard themselves as realistic in subordinating growth and gain to income, but they are actually being extremely unrealistic. As retirees you will have no chance to earn back any losses this thinking locks you into.

Send your questions on finances, investments, taxes to Janeway, MEDICAL TRIBUNE, 880 Third Avenue, New York, N.Y. 10022.

IN CONSULTATION

What's New and Important in Ophthalmology?

The Consultant

DR. ANTONIO R. GASSET
Assistant Professor of Ophthalmology
University of Florida College of Medicine

PERHAPS THE GREATEST ADVANCE in the treatment of corneal disease in over a decade has been the development of the soft contact lens and its use as a "bandage." Innumerable cases of severe blinding keratitis (corneal disease) have been cured or controlled through this relatively simple and inexpensive mode of therapy. Patients have been treated who had previously undergone almost all known medical and surgical modalities in an unsuccessful attempt to control the disease process or to restore vision. In the overwhelming majority of cases, soft lens therapy has been able to provide relief of pain, control of the underlying disease process, to promote the healing of damaged and diseased tissue, and, in many cases, to improve or to restore vision.

What are the characteristics distinguishing the hard contact lens from the soft contact lens?

Soft contact lenses are made of a type of hydrophilic or water-absorbent plastic. They have the brittleness of a cornflake when dry, but become soft and pliable when saturated with water, saline or tears. When placed on the eye, they mold themselves to the shape of the cornea, offering considerably more comfort than hard lenses, particularly in the early stages of wear. Because of their softness, they tend to minimize irritations, cornea swelling and abrasions sometimes caused by hard lens wear.

Hard contact lenses are made of methylmethacrylate or plexiglass, a material that provides excellent visual acuity in a wide range of visual defects. Since soft contact lenses weigh more than hard contact lenses, they have to be fitted slightly larger than the cornea diameter. They range in diameter from 12.3 to 15.5 mm. Hard lenses, in contrast, are presently fitted from 7.00 to 9.00 mm in diameter and don't quite cover the cornea. Due to the fact that these lenses are fitted larger than the cornea, one of the major problems of hard lens wearers—dirt specks or particles lodging under the lens—seldom arises with soft lenses.

When is the soft contact lens used therapeutically?

Eyes that are treated with the bandage lens are nearly always seriously diseased. With it the practitioner is able to bring comfort to patients who have had pain for years. This is a dramatic benefit that can be achieved in many cases by no other form of therapy now available. Soft contact lenses have helped to relieve pain and restore vision in patients with corneal ulcers, bullous keratopathy (corneal blisters) or "dry" eyes (a painful condition marked by an insufficiency of tears).

Soft lenses have also been useful in correcting aphakia (the result of cataract surgery). Permanent or constant wear of soft contact lenses in aphakia is not new. Since 1969, we and other ophthalmologists have been using the lathe-cut contact lens for permanent wear in a very selective group of aphakic patients. This procedure was reserved for cases where its use was absolutely necessary. However, once the patients were selected, most of them were able to wear the lens continuously, 24 hours a day. Not a panacea by any means, it requires a significant amount of knowledge and skill in contact lenses as well as in designing the surgery for this purpose, e.g., round pupil, elimination of corneal astigmatism, etc.

Heretofore, complications have been few and reversible. But more serious and permanent complications may result and will probably occur as the number of practitioners fitting these lenses for permanent wear as well as the number of patients increase. It is not my purpose to imply that permanent wear is safer than conventional techniques, but it is a very promising procedure for the future. Even at the present time, it may offer a safer alternative to intra-ocular lenses. Further improvement of either procedure may result in the wider use of these techniques. However, at the present time they should be limited to patients in whom conventional methods have failed and the proposed benefits clearly outweigh any possible risk.

While medical use of the bandage lense requires considerable attention and care, it does have advantages.

The main advantage of the procedure stems from the fact that no knife, no sutures, no hospitalization, no nurses, no abnormal financial costs are needed. In addition, if the therapy proves unsuccessful, or if for any reason the physician wishes to terminate therapy, he may do so by the simple procedure of removing the lens from the patient's eye. Moreover, it does not preclude later more risky surgical procedures.

For routine use of contact lenses, when should the hard contact lens be prescribed? When the soft lens?

This should be the choice of the individual, with the proper aid and consultation of his doctor. For optical reasons, there are persons who will see better with hard or soft contact lenses. Since soft lenses take the shape of the cornea, they tend to reproduce corneal astigmatism without correcting it. In these cases, both eye glasses and hard lenses can correct the blurring of vision caused by corneal astigmatism.

Another type of astigmatism, lenticular astigmatism, caused by an irregularity of the natural lens, is corrected only by eye glasses. In many cases, lenticular astigmatism itself corrects corneal astigmatism, eliminating the necessity of correction by accessory lenses. But it is also not uncommon to find that elimination of corneal astigmatism by hard contact lenses will result in the production of residual astigmatism or the bringing out of lenticular astigmatism with its blurring of vision. That this residual astigmatism has not been a significant drawback in the fitting of hard contact lenses stems from the fact that most patients find some degree of residual astigmatism quite tolerable if the other refractive errors are corrected.

While corneal astigmatism was assumed by some to be the main limiting factor in the wear of soft contact lenses, it has actually been a problem in only about 5 to 10 per cent of the population. More important, in fact crucial, is the fluctuation in vision. These fluctuations are experienced as alternate blurring and clearing of vision. The main cause of vision fluctuation with soft lenses is the fit of the lens. Individual corneas vary in diameter and curvature. Although a soft lens tends to take the shape of the cornea, it may not provide a perfect match even though it may feel comfortable. A poor match with a hard lens would cause corneal swelling, pain and discomfort; with a soft lens it is the vision that suffers.

If a soft lens is too curved for the cornea, it gets pressed in and out during blinking, causing alternate blurring and clearing of vision. If it is too small in diameter or too flat, it will move up and down with each blink or it will be displaced laterally and invariably it will cause fluctuations in vision. This fluctuation in vision caused by the early "Model-T" of the hydrophilic lenses has been greatly corrected by the introduction of lenses with different base curves. Vision fluctuation will probably be completely eliminated in the near future. The visual acuity obtainable in a given patient with a given refractive error is dependent not only on the patient and the refractive error, but also upon the expertise of the fitter and, to an extent, upon the availability of lenses of different base curves and diameters. Many people desire contact lenses for different purposes. The individual with a high degree of corneal astigmatism who can not wear hard contact lenses may be satisfied with this alternative for sports and social activities while wearing eye glasses when driving a car or reading a book. Since the main advantages of soft lenses are comfort and ease of adaptation, successful hard contact lens wearers should not be encouraged to switch from hard to soft contact lenses.

What problems do patients have with initial and prolonged use?

After many years and millions of patients wearing contact lenses, both hard and soft lenses have passed the test of time and have proven themselves both safe and effective. Certainly, however, many minor problems still remain with initial and prolonged use of these lenses.

It is said that for every person who successfully adjusts to hard contact lenses, another gives up because of intolerance to the lenses. Although tolerance has been significantly improved with the introduction of the semi-flexible, thin, small, hard contact lens, poor tolerance to a hard foreign body still remains the main problem. In nearly every respect, the soft contact lens is much kinder to the eye than the hard contact lens and is extremely well-tolerated by patients.

Hard contact lenses are more prone to cause corneal edema than soft. When the edema is light and superficial, the patient sees a great cloud over all objects. When the edema becomes more marked, the patient will notice brightly colored halos around light. A poorly fitted hard contact lens can cause a great deal of corneal edema in a relatively short time. Even a well fitted hard lens can cause corneal edema or injury of corneal epithelium. On the other hand, soft lenses are almost free of this unpleasant side effect. Soft lenses can be worn during all waking hours either from the first day or very shortly after the beginning of adaptation. Hard lens wearers suffer a loss of tolerance for the lens if they don't wear it on a rather regular basis for quite a few hours every day. The soft lens wearer can abandon the lens for as long as he or she wishes and start wearing it again any time without ill effects. Intermittent social wear is therefore a considerable advantage of this type of lense.

Hard contact lenses, particularly the old, large and thick lenses, when worn for long periods of time can produce a temporary change in the shape of the cornea. Patients are often inconve-

Continued on page

New Study of Sclerosis

Dr. Harry Bartfield, St. Vincent's Hospital and Medical Center, New York, will coordinate new multidisciplinary study of amyotrophic lateral sclerosis over next two years with NIH funding of $600,000-plus.

wine talk

By JOHN CHAMBERS
Author and Consultant to Morrell & Company, New York Wine Merchants

Wine Books

A few days ago I was lunching with a friend and an out-of-town colleague who was visiting him. Hearing that the colleague was a doctor, I asked whether he had ever read this column. He said he had, and when I asked for his comments, he mentioned several things pro and con. "There's only one thing you haven't done that I wish you would," he added. "Do a column on wine books."

Wine books can be divided into four categories: the general guides, the encyclopedias, the detailed books on specific areas, and the so-called cocktail table books which range from pictorial tours of the world's vineyard areas to pleasantly chatty discussions of wine and the wineclife.

Of the general guides, the best is probably the *Signet Book of Wine* (Signet paperback) by Alexis Bespaloff. This is a 221-page volume which passes the wines of the world through a quick but cogent review, and then considers the matters of serving, storing, ordering in restaurants, etc. Other good inexpensive books of this type are the *Vintage Wine Book* by William Leedom (Vintage), and *An Insider's Guide to Low-priced Wines* by William Massee (Dolphin). In hardcover, *Wine* by Hugh Johnson (Simon & Schuster) is top-rate, and I would recommend (if it can be found) *Wines* by Julian Street (Knopf), an old classic.

Major Encyclopedias

The first of the major encyclopedias to appear on the market was produced under the direction of Frank Schoonmaker (*Encyclopedia of Wine*, Hastings House). It is an excellent book with an emphasis on precision and conciseness. Somewhat broader in scope and more designed for general readability is the *Encyclopedia of Wine and Spirits* by Alexis Lichine (Knopf). Recently Hugh Johnson has authored a *World Atlas of Wine* (Simon & Schuster) which combines detailed maps and an informative text. It is a *rare avis.*

The best way to approach the third category is by region. Fortunately a few books have surfaced as best-in-class, and these will give the reader as much detailed information as he will ever need. My recommendations would be: *The Wines of France* (Lichine, Knopf), *The Wines of Germany* (Schoonmaker, Hastings House), *The Wines of Italy* (Ray, McGraw-Hill), *The Great Wines of Italy* (Dallas, Doubleday), *Sherry and the Wines of Spain* (Rainbird, McGraw-Hill), *The Wines of Portugal* (Allen, McGraw-Hill), *The Wines of America* (Adams), *The Treasury of American Wines* (Chroman, Crown), and *The Wines, Vineyards, and Vignerons of Australia* (Simon, Lansdowne Press).

The fourth category is a buy-what-attracts-you area. I would recommend particularly the wine diaries of Harry Waugh. They provide excellent reading.

Diurnal Excretion May Sift Renal from Essential Hypertension

Medical Tribune World Service

MARTIN, CZECHOSLOVAKIA—Essential hypertension may be distinguished from hypertension due to renal artery stenosis on the basis of diurnal rhythm of sodium and water excretion, according to Drs. Ota Schuck and Jarmila Stribrna, of the clinical pharmacology unit, Institute of Clinical and Experimental Medicine, Prague.

Both groups of patients show nocturia, the investigators reported at a meeting of the International Endocrine Society here. However, a large study has established that patients with essential hypertension excrete sodium and water at the same rate during day and night (day/night ratio of 1.0), while those with renal hypertension excrete more Na and water at night (day/night ratio less than 1.0). The normal ratio of day to night sodium excretion is about 1.5.

The characteristic diurnal rhythm excretion patterns remained even after treatment with reserpine, hydralazine, or other antihypertensive agents brought blood pressure down, the researchers said. Neither are diurnal rhythms affected by salt intake. Furthermore, there was no statistical relationship between levels of Na excretion, mean blood pressure, or creatinine clearance.

The data suggest that control of nocturia is at the level of tubular transport in the kidneys and unrelated to renal hemodynamics, the investigators said. They speculated that at some stage in the development of essential and renal hypertension a resetting of tubular transport occurs that is resistant to change, even after blood pressure is reduced.

© 1975, Medical Tribune, Inc.

Planned Parenthood: Infarct Risk Curbs 'Pill'

Continued from page 1

same age group, for an increase of 5.7 times in relative risk.

The estimated incidence of fatal myocardial infarction in women of this age group showed a comparable spread: 11.7 per 100,000 nonusers and 54.7 per 100,000 users, with the relative risk increased 4.7 times.

Dr. Tyrer thinks further research will be needed to substantiate or disprove these studies, and cautions that it is important to maintain perspective in considering risks versus benefits.

As she pointed out, the death rate in this country for acute myocardial infarction in women aged 35 to 44 was 12 per 100,000 in 1973, according to the American Heart Association, and thus a fivefold increase would still not represent a very large number of women.

In-depth History

Discussing guidelines for management of contraception in women over 40, Dr. Tyrer said she considers it essential to obtain an in-depth history—both personal and family—to determine high-risk factors, in addition to performing the customary physical exam.

The British studies found, she noted, six risk factors more often in patients with myocardial infarction than among controls: heavy cigarette smoking, diabetes, hypertension, hypercholesterolemia, a history of pre-eclamptic toxemia, and obesity.

She believes agreement is not universal that the combined effect of these factors and the use of oral contraceptives is synergistic, but she says it is undoubtedly additive and stresses that older women must be checked carefully for the presence of the factors.

The laboratory tests advised by Dr. Tyrer would include the routine ones given to all women seen at Planned Parenthood clinics: hematocrit values, testing for syphilis and gonorrhea, urinalysis, and the Pap smear.

But for the older woman, Dr. Tyrer thinks that—when indicated—this battery of tests may need to be augmented to include blood cholesterol (or SMA 12), triglycerides, stress EKG, the three-hour glucose tolerance test, and a chest x-ray (for heavy smokers).

If the patient's history or laboratory findings indicate the presence of one or more high-risk factors, then Dr. Tyrer says it is appropriate for the clinician to point out the potential hazard of oral contraceptives and to suggest alternate methods of family planning.

"Physicians have a right to refuse to prescribe the agents if in their best judgment—after reviewing the history, the physical, and the lab tests—they feel the patient's risk is too high," she said. "They have to be able to practice according to the dictates of their conscience combined with their best medical judgment."

What if the patient insists on use of the oral agents?

Physicians then have three alternatives, in Dr. Tyrer's opinion. One is to obtain a signed release indicating that all possible hazards have been explained and that the patient elects to use the agents and assumes full responsibility herself.

Special Lab Tests

Another is to advise the special laboratory tests, assuming that these have not already been performed, or further consultations, in order to reach a final decision on whether or not to prescribe oral agents.

The last alternative is to refer the patient elsewhere for management of contraception, "since in no case should physicians be coerced into doing something they consider medically inappropriate any more than patients should be coerced into actions they may not be happy with."

Dr. Taylor offered these options when oral agents seem contraindicated:

- The diaphragm, "which is familiar to many women in the older age groups and remains a good method," despite a failure rate of about 15 per cent. Effectiveness can be increased to a level "between that of oral agents and intrauterine devices, provided the woman uses a combination of diaphragm with a suitable jelly, foam, or cream, and the man uses a condom."
- The intrauterine device, which has a rate of effectiveness approaching that of oral agents and when used correctly is "less likely to cause serious complications." Follow-up at three months and then every year is advised.
- Sterilization, which is being elected by an increasing number of couples—"particularly those in the older age groups" who have had all the children they want.

A directive sent by the National Medical Committee of Planned Parenthood-World Population in October to its medical service chapters throughout the country contains the following statement:

"After due deliberation the National Medical Committee recommended that those patients 40 or older either desiring to initiate contraception with oral contraceptives or currently taking these agents be made thoroughly aware of the increased risk. In addition, they should be encouraged to utilize other forms of contraception, either of a temporary or a permanent nature."

"Let me tell you about the medicine I'm going to prescribe."

TALKING OVER VALIUM®(diazepam) THERAPY WITH YOUR ANXIOUS PATIENT.

A patient often benefits by a greater understanding of his treatment program. You may find it helpful to make your patient aware that the purpose of therapy with Valium is to help reduce discomforting and disabling symptoms of excessive psychic tension and anxiety. It is beneficial for him to understand that much of his tension and anxiety can be relieved by your reassurance and counseling, and that these measures can do more than anything else to help him cope with his basic problems. The patient is reassured in knowing he can expect his medication to help him avoid feeling overwhelmed by his symptoms. And it's also good for him to realize that he will be taking Valium only as long as he needs it.

Your expressed confidence in the medication prescribed, and the positive atmosphere in which therapy is given and accepted, work to the patient's advantage.

Selection of a dosage regimen is an important consideration when Valium (diazepam) is prescribed, and dosage should be individualized to achieve maximum beneficial effect. If the patient understands clearly when and how much to take, and if he knows why it's to his benefit to follow the regimen closely, the chances are better that he will take the medication precisely as directed. That should help avoid missed doses and discourage taking too much or too little medication—all of which can have an undesirable effect on the management of the patient's condition.

"It's important that you follow my directions closely."

"I'll see you again the week after next and we'll see how you're making out."

Your patient is often likely to feel reassured when you talk about seeing him again to check his progress. A planned visit evidences your continued interest and affords the patient an opportunity to report improvement he has made and to relate whatever continuing or additional difficulties he may be experiencing. It's also a chance for him to describe his response to therapy with Valium.

During follow-up visits, as your patient talks about his medication and about its effects on his symptoms, he will provide the kind of information that will be of great help in evaluating total therapy, adjusting the dosage of Valium, or discontinuing the medication entirely if that seems indicated.

Valium® (diazepam)

2-mg, 5-mg, 10-mg scored tablets

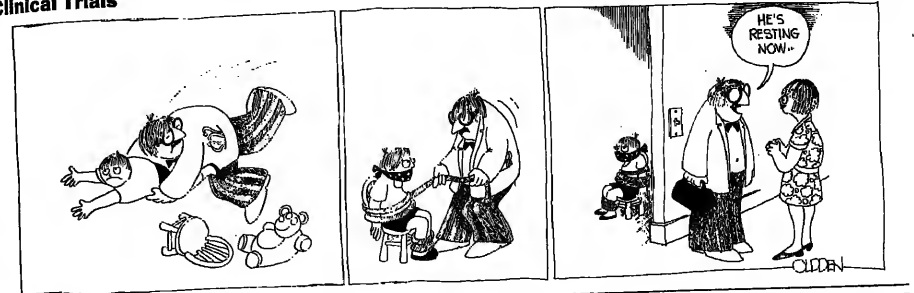
for individualized treatment of psychic tension

ROCHE

Please see the following page for a summary of product information.

Clinical Trials

By Oldden



New Combined Drug Held Effective Against All Bacteria Tested

Continued from page 2

bactericidal activity. In fact, the researchers reported, PCS not only eliminates DFA self-reversal but also enhances the antimicrobial activity of both agents manyfold.

The new drug has proven equally effective when given to mice orally or by injection against a broad spectrum of bacterial species, including all the serious pathogens for man. The Merck scientists were particularly pleased that Pseudomonas aeruginosa, a highly resistant pathogen which is a growing problem in hospitalized patients, proved susceptible to the drug's effect.

According to Dr. Christopher M. Martin, senior director of medical affairs at Merck's research laboratories, not one bacterial strain tested so far has been resistant to the drug. He said the company was "cautiously optimistic that bacteria will have a terrible time with this drug."

Apprehension that the new agent might kill off harmless and necessary bacteria as well as virulent pathogens has been dispelled by studies in mice which show that it is absorbed into the bloodstream from the upper intestinal tract, Dr. Martin said. Bacteria in the lower tract, the mouth and the skin were unaffected.

Safety testing in human volunteers is expected to begin in early 1976, Dr. Martin announced. Monkeys receiving up to 30 times the normal human dose have exhibited no side effects. However, he cautioned, earlier cycloserine drugs also produced no side effects in animals but caused tremors, behavioral changes and convulsions in humans.

Outpatient Arteriography

Medical Tribune Report

ROCKLAND, MAINE—Outpatient arteriography could mean considerable savings in hospital fees, Drs. Peter E. Giustra and Paul J. Killoran, of the radiology department of Knox County General Hospital, said recently. In a four-year study of 300 patients requiring arteriography, the physicians found no increase in complications and no hospital readmissions among 100 outpatients. The study confirms other reports that complications arise during or right after arteriography.

Major Victory Seen in Grant Policy Reversal

Continued from page 1

O.M.B., ever the dour keeper of the government's purse strings, had vigorously opposed continuation of the main education-funding feature of the 1971-74 luw—capitution, under which health schools have been granted specified amounts of money for each student they enroll.

Dr. Mathews, who, as president of the University of Alabama, had worked hand-in-hand with the university's College of Community Health Sciences to resolve health manpower problems in rural Alabama, presumably brought his experience to bear in convincing the White House Domestic Council to endorse the new approach. Dr. Cooper, for his part, was also reportedly dissatisfied with the old line of thinking.

The anticipated legislation, which would replace the 1971-74 health manpower law that expired at the middle of last year, specifies among other things how and to what extent the federal government will finance the training of physicians, osteopaths, dentists, veterinarians, optometrists, pharmacists, podiatrists, and public health specialists.

'Imaginative' and 'Responsive'

Although the first bill to replace the expired statute was introduced a year and a half ago and many others have been put forward since then, no new law has been enacted because of conflicts over ways to support health education, spending levels, and methods of dealing with geographic and specialty maldistribution and the foreign medical graduate (FMG) problem.

Unexpectedly, on September 16 Dr. Cooper outlined a completely new administration proposal.

Senator Kennedy, who with other legislators (including Republicans) had been dismayed by what they called the negativity of previous administration bills, immediately hailed Dr. Cooper's testimony before his Senate health subcommittee as "enormously forthcoming," "imaginative," and "responsive."

So effusive were the Senator and Assistant Secretary in their expressed mutual admiration that a subcommittee staff member afterwards called the session "a regular love feast."

Earlier administration bills would have drastically reduced capitation payments as a prelude to abolishing them, but the Senate and House bills that passed their respective chambers last year, but never reached conference, and the refurbished bill that the House passed on July 11 all continued capitation as a basic policy. Now so does the Cooper proposal for schools of medicine, osteopathy, and dentistry, though it reduces capitation payments for student veterinarians, optometrists, and podiatrists and abolishes them fur fledgling pharmacists.

H.E.W.'s showdown with O.M.B. and the White House's decision to throw administration support behind capitation occurred only hours before Dr. Cooper was scheduled to testify at the opening session of the Kennedy subcommittee's 1975 hearings on health manpower legislation.

The cliff-hanging nature of the struggle within the administration was such, according to H.E.W. sources, that two prepared testimony statements were actually written for the Assistant Secretary—one favoring capitation and the other opposing it. Some senior H.E.W. officials did not learn which testimony he would present until an hour before he began speaking.

The new administration proposal, which has not yet been formally introduced in either house, would continue capitation at the current level of $1,500 per year for medical, osteopathic, and dental students, phase it out over the three years of the new law's life (fiscal years 1977 through 1979 if it is enacted by the middle of next year) for veterinary, optometric, and podiatry students, and discontinue it at once for pharmacy students.

It also deals in a much more concrete way than previous administration proposals with the maldistribution and FMG problems that have received so much attention in legislators' bills.

$55 Million in Scholarships

To remedy the geographic maldistribution of health workers—and particularly doctors—the proposal would require schools to set aside percentages of their enrollments for students who agree to practice in underserved areas after graduation (15 percent in fiscal 1977, 20 per cent in fiscal 1978, and 25 per cent in fiscal 1979). It would also establish a scholarship program for such students amounting to $55 million for 5,000 students in fiscal 1977, $75 million for 7,500 students in fiscal 1978, and $95 million for 9,500 students in fiscal 1979. Capitation payments to medical, osteopathic, and dental schools that did not agree with these plans would be phased out over the law's life.

To encourage the production of more primary care physicians (general and family practitioners, general internists, obstetrician-gynecologists, and pediatricians), medical schools would have to maintain a specified percentage of their residencies in those specialties (35 per cent in 1977, 40 per cent in 1978, and 50 per cent in 1979).

Though other bills have provisions written into them that would limit the number of FMG's allowed into American residency programs, generally to 25 per cent more than the previous year's total of new graduates from domestic medical schools, the new administration proposal is less specific.

Single Qualifying Exam

"The department...supports the development of a single qualifying examination for all physicians who are entering hospital training programs where they will have some responsibility for patient care," Dr. Cooper said. "We propose to convene appropriate organizations and groups for the development of such an examination. Because this examination is not yet established and because immigrant physicians should be expected to meet standards of U.S. medical graduates in provision of care in the United States, it is proposed that the department will determine the most appropriate screening examination for FMG's."

He also suggested that H.E.W. should develop ways to integrate Americans studying medicine abroad into U.S. medicine through transfer programs.

The new administration measure still differs in some respects from Senator Kennedy's own and that passed by the House in July.

Because the administration, Kennedy, and other proposals have still to work their way through the Senate's health subcommittee, the full Labor and Public Welfare Committee, and the Senate itself, it is not considered likely that the Senate will vote out a bill until next spring. When it does, its version of the legislation will have to be reconciled with the House's in conference committee before it goes to the President for signature.

Computer Monitors Heart

Use of new computer-assisted arrhythmia monitor (American Optical) is demonstrated by Dr. Edward A. Pertenope and Monica Geiger, R.N., at JFK Medical Center, Edison, N.J.

New Procedure Corrects Transposed Great Arteries

Continued from page 1

Jatene stressed that efforts to accomplish total arterial correction of transposed vessels go back to 1954 and 1955 when Drs. Charles C. Bailey and E. B. Kay independently sought to achieve anatomical correction of the defect. Later ingenious attempts to make the correction on the arterial side have been clinical failures, and more recent ideas have not progressed beyond the experimental level, Dr. Jatene noted. In the standard Mustard procedure, the right coronary remains in the pulmonary artery.

The twin keys to the new technique, according to Dr. Jatene, are (1) to excise both coronaries, along with a piece of the aortic wall—prior to implanting in the pulmonary artery—in order to ease suture problems and avoid later stenosis; and (2) to transect the great vessels far from the valves, so that the anastomoses are easier to do and to correct if leaks are observed.

The technique emerged in the course of extensive experience with aorto-coronary bypass surgery, Dr. Jatene said, adding: "We believe it is reproducible by most cardiovascular surgeons."

Briefly, in Dr. Jatene's procedure, the ascending aorta and pulmonary trunk are dissected out. The two coronaries, along with a piece of the aortic wall, are resected and implanted in the pulmonary artery, still in the posterior position. The openings in the aortic wall are closed with a patch. The aorta and pulmonary artery are transected, transposed and then anastomosed. The differences in diameter between the two vessels are equalized by two sutures in the distal and proximal ends of the pulmonary artery so that they correspond to the diameter of the ends of the aorta. The ventricular septal defect is then closed through a right ventriculotomy with a patch.

In Good Condition

In the first clinical trial, the Jatene procedure was performed in an infant with transposed vessels and a large VSD. Hemodynamic studies 20 days after surgery showed complete correction of the defect. The postoperative course was uneventful and the infant at seven months followup in fu good condition without cyanosis, Dr. Jatene reported.

Collaborators were Drs. V. G. Fontes, P. P. Paulista, L. C. B. de Souza, F. Neger, M. Galantier and J. E. M. R. Souza.

In an interview, Dr. Kirklin commented that while there "will be no stampede to use the Jatene technique, it will unquestionably be tried all over the world. Cardiovascular surgeons have been interested for a long time in achieving a correction of this anomaly on the arterial side."

High Cataract Rate Found In Asthmatic Children On Corticosteroid Drugs

Continued from page 1

"Findings in the children we looked at, when compared to our control of 35 child asthmatics who had not been on oral steroids, are definitely cause for concern," he added.

Although most of the children studied had been taking prednisone, the investigators said they could not ineriminate one steroid over another. And despite earlier reports of the possibility that the presence of eczema might have a relationship in cataract formation in patients who are on chronic steroid treatment, the study found no such evidence.

"Clearly, our point is that there may be some children who don't need the doses now being prescribed, and maybe in the future we should look more carefully at the efficacy of day to day steroid therapy," Dr. Spaulding said.

"At any rate," he added, "there is no doubt that children who require corticosteroids to keep their asthma under control should be afforded the opportunity of ophthalmologic examination at least once a year."

One Man...and Medicine

ARTHUR M. SACKLER, M.D.,
International Publisher, Medical Tribune

To Direct and Not Distract Public Interest
Part II

DO NOT THE CONSUMER and so-called "public interest" advocates recognize that unbalanced attacks against doctors and drugs are as dangerous a form of misrepresentation as misleading advertising?

Are they not bound by a higher ethic than that which they feel should apply to the poffery of the propaganda and the actions of vested interests? If the public interest groups represent the interests of the public, should they not lead rather than mislead, should they not direct and not distract?

They cannot have it both ways.

What are the truly major preventable causes of morbidity and mortality in the United States today? Doctors and drugs? The less developed nations of the world do not think so as they suffer the ravages of diseases which are now so rare here they can hardly be demonstrated to medical students in this country.

One would think that implicit in the conclusions of a public interest group calling for cessation of new hospital construction should be the recognition that in an ever-increasingly polluted environment something has happened to reduce morbidity and diminish the need for hospital facilities. Could it be, heaven forbid, doctors and drugs?

They can't have it both ways.

Dangerous Distortions

Why are alcohol and tobacco so conspicuous by their absence from the activities of most of the "public interest" groups? As serious a problem as street drugs were, the drug hysteria of the preceding area distracted the public from real issues. We know that in this less than "best of all possible worlds" some doctors and drugs are deficient; that does not justify a rejection of modern medicines. To do so is to distort reality.

It is dangerous to the public and its health to focus on minor issues while simultaneously shifting attention away from major problems. It is dishonest to contribute, in any way, to obfuscating the enormous preventable morbidity and mortality victimizing Americans. Such distortions of health perspectives raise serious questions as to the intent and the integrity, the intelligence and influence of certain individuals who could exert positive rather than negative effects on regulatory and legislative processes.

Focus on Real Health Problems

So-called "public interest" groups proclaiming "the right to know" and "the need for informed consent" cannot at the same time contribute to the distortion of the truth—and all the truth—on the facts of life and death. They cannot proclaim their interest in legal rights and disclaim their responsibility for the failure of legislative and regulatory bodies to do more, *much more*, than has been done to reduce the major causes of death and disability, to protect the health of mother and fetus, to assure more adequate and better balanced nutrition for Americans and to propose truly effective measures for better control of the most toxic (and cardiotoxic), most habituating and debilitating and the most clearly identified of carcinogens, such as tobacco.

The public interest groups cannot have it both ways.

They use or should be as bound by the ethics of true social responsibility as they must be by the criteria of logic and science. In fact, they should be more sensitive to these than any other group in our society.

They cannot have it both ways.

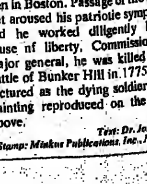
EPIGRAMS—Clinical and Otherwise

Only the lion and the cock, as Galen says, withstand love's shock. So dearest, do not think me rude if I now yield to lassitude but sympathize with me. I know you would not have me roar, or crow.

Oliver St. John Gogarty, M.D.
(1878-1957)
in *After Galen*

Medicine on Stamps

Joseph Warren



US Bicentennial 10c

Born in Roxbury, Mass., in 1741, he graduated from Harvard in 1759, studied medicine, and very quickly became one of the leading medical men in Boston. Passage of the Stamp Act aroused his patriotic sympathies and he worked diligently in the cause of liberty. Commissioned a major general, he was killed in the battle of Bunker Hill in 1775. He is pictured as the dying soldier in the painting reproduced on the stamp above.

Text: Dr. Joseph Kiss
Stamp: Minkus Publications, Inc., New York

'PERC' Bag Aids Prevention Of Postoperative Atelectasis

Medical Tribune Report

SAN FRANCISCO—An effective, inexpensive device which has proved highly reliable in the prevention of postoperative atelectasis has been developed here by a University of California pulmonary specialist.

Called a perioperative respiratory care (PERC) bag, the device developed by Dr. Anthony Cosentino, director of the pulmonary laboratories at St. Mary's and Mt. Zion Hospitals, and Associate Clinical Professor of Medicine at the University of California, fills the "need for a device which allows physicians to calibrate the breaths a postoperative patient takes in efforts to prevent pulmonary complications and gauge necessary amounts of pain medication," Dr. Cosentino told MEDICAL TRIBUNE.

The new device consists of a condom enclosed by a one, one-and-a-half, two or three liter polyethelene bag, which is vented to insure against significant back pressure, making it effortless for a patient to fill.

According to Dr. Cosentino, the device—which sells to hospitals for about $2 each—has successfully helped prevent postoperative atelectasis in about 100 patients, without the use of an intermittent positive pressure breathing (IPPB) device.

Patient Does the Work

"We needed an inexpensive bedside device that the patient could operate, and at the same time give us inspiratinn volume and a good index for amounts of pain medication to administer," Dr. Cosentino said.

Although the patient does all the work, he added, technically the PERC bag is a positive pressure device that works as well as the conventional IPPB.

"This is in essence a positive pressure device, because even the normal breath a person takes is done so under positive atmospheric pressure. Pressure at the mouth is 1,000 centimeters of water, so as the thorax is expanded, thoracic pressure drops to something sub-atmospheric—hence, there exists a positive pressure from the mouth into the lungs. This is where there is a gross misunderstanding in thinking IPPB is something magic just because the pressure is a little supratmospheric," he explained.

Elaborating on what he calls "the overrated IPPB," Dr. Cosentino remarked that cost of the new device, coupled with its proven effectiveness in helping to prevent atelectasis and ability in gauge breath volume, make it more practical than IPPB, blow gloves or other conventional equipment.

One problem, he added, is that too many doctors believe positive pressure is superior to breathing and lose sight of the fact that the act of breathing alone is positive pressure.

"A lot of physicians expound the wonders of IPPB, but the simple fact is that most authorities in the field agree the inspiratory maneuver is the important thing," he said.

Hypothermia of Brain Only Preferred In Hypoxia Risk

Medical Tribune World Service

PRAGUE, CZECHOSLOVAKIA—Local hypothermia of the brain is preferable to whole body hypothermia in surgery and trauma where brain function is endangered by hypoxia, Dr. V. A. Bukov, of the Laboratory for Tissue Transplantation, Academy of Medical Sciences, Moscow, told the International Congress of Pathological Physiology here.

The craniocerebral cooling technique has been used clinically in over 1,000 cases of open heart surgery, with heart stoppages up to 30 minutes, and in neurosurgery as well, Dr. Bukov said. Future work will try to extend the time limit even further.

The technique utilizes a new apparatus which by cooling the surface of the cranium can automatically attain and keep brain temperatures at preset levels (e.g., 26 C) while moderately cooling the rest of the body to another level (e.g., 30 or 31 C). The apparatus also permits rapid return of temperatures to normal when desired.

Implanted 'Umbrella' Filter Prevents Recurrent Emboli

Continued from page 5

Although the procedure is simple, it is associated with some possible risks and complications, Dr. Schlosser noted. These include errors in placing the filter, shifting of the screen, recurrence of embolism (rarely), and especially edema of the lower extremity.

Dr. Schlosser said patients were generally given constant anticoagulant therapy for one to two years after the operation. To evaluate the hemodynamic situation, 25 patients were examined by cavography over a period of six months to two years.

In eight, the team found complete blocking of the v. cava in the area of the screen filter, with the formation of excessive collaterals, and some tendency to edema of the lower extremity.

"However, four of those had a pelvic and leg vein thrombosis before the operation, with a tendency to edema."

Another eight showed partial blocking with beginning collaterals, without edema of the lower extremity, and nine patients showed a completely patent filter without collateralization or tendency to edema.

"Summing it up, the method offers a high measure of protection against pulmonary embolism, with a degree of risk that is tolerable," said Dr. Schlosser.

In certain cases, it could be used prophylactically in phlebographically confirmed, fresh pelvic and leg vein thromboses, especially in the lower leg veins, with freely floating thrombi the pre-op and post-op phases.

IN CONSULTATION

Continued from page 13

enced by their inability to switch back to eye glasses. Changes induced in the cornea by hard lens wear may make the acuity through eye glasses changeable nnd unsatisfactory for long periods of time after the hard lenses are removed. Experience hns shown that complications such as spectacle blur or abrasion occur much lces frequently with soft than with hard contact lensea.

Certainly, soft contact lenscs are less durable than hard lenscs. However, since soft lenses cling to the eye better than the hard ones, they are much less likely to fall out accidentally, not a rare occurrence with hnrd lenses. Stetistics have reported between 25 and 40 per cent of herd contact lens wearers lose one or both of their lenses within the first six months. Of even greater importance is the fact that most of the instnnces of corocal abrasion, irritation or apectacle blur are produced by a warped, scretched, old, hard contact lens. Both hard and soft contact lenscs should be replaced periodically to let the lens wearer benefit from new materials or improvements in teehnology, and to avoid the damage that can be caused by warped or scratched hard lenaea or old soft lenses that have become coated with mucous. It is better not to save the patient's money than to risk potential damage to the eye.

The heat sterilization method employed by one manufacturer of soft lenses and the cold, hydrogen peroxide sterilization procedure employed by another are both extremely safe and effective, with ao incidence of clinical bacterial infection certainly not greater thnn that found in hard conlnct lenscs and perhaps approaching that found in individuals wearing spectecics.

Is there any advantage or disadvantage in having both spectacles and contact lenses?

Eye glasses are the safest, most effective device for the correctioo of refractive errors. Every contact lens patient should have a pair of spectacles that provide best visual acuity so as to enable free nlternation with contact lenses. In addition, when the wearer of hard lenses does put on regular eye glasses and is unable to see clearly, this may be an indication of spectacle blur requiring attentioo.

A contact lens wearer should be able to switch to eye glasecs as necessary for correction and/or comfort, elimination of glare or difficulty seeing at night, or when there are problems of visual acuity, conjunctivitis, irritation, or other complications.

Next in Consultation

DR. JAMES M. STENGLE, *Deputy Director for Medical Affairs, Lister Hill National Center for Biomedicol Communications, N.I.H., and Chairman, Medical and Scientific Advisory Council, National Hemophilia Foundation*, will discuss what's new and important in hemophilia.

IMMATERIA MEDICA

For the President Who Has Nothing

It may be that the President of your favorite medical society, country or club has everything, but just in case you're looking for something, we call your attention to an ad in the Miscellaneous column of the *Wall Street Journal*, sandwiched in between a peat moss nd (200,000 yards) and one for antique hallmarked British silver flatware:

MISCELLANEOUS

FORMER PRESIDENTIAL PRIVATE RAILWAY CAR AVAILABLE. Fully equipped, for short or long term lease. Inquiries to be made to Cheerleurie, Ltd., 280 Madison Avenue, New York City, 10016. (212) 889-3565

The short-term lease idea looked mighty attractive.

Tut-tutted Again

We've been tut-tutted again by Dr. Sam Nixon of Floresville, Texas, because we referred to *The Education of H*Y*M*I*E K*A*P*L*A*N* rather than H*Y*M*A*N, which is the way Dr. Sam correctly remembers it.

Our trouble is that we affectionately remember Hyman as Hymie. What can we say? It won't be the first time that affection has led us to err.

But if we may, we'd like to send up a cheer for Leo Rosten who discovered Hymie, Bronx-born and bred, and so hurd-up for a tiny bit of recognition that he decorated his name with asterisks. It was probably the most expressive use of typography since e e cummings read archy and mehitabel in Don Mnrquis' column. Lest this be considered an "inside" joke accessible only to aging physicians (over 50), we will explain that archy was a cockroach whose physical limitations made it impossible for him to use the typewriter shift key for capitals and punctuation.

It was archy who, in *archy's new deal*, said:

there is bound to be a certain amount
of trouble running any country
if you are president the trouble happens
to you
but if you are a tyrant you can arrange
things so
that most of the trouble happens to
other people